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Increased Defensive Measures Managua, Nicaragua (S)

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INCREASED DEFENSIVE MEASURES MANAGUA, NICARAGUA (S)

1. Extensive defensive measures have been taken in the Managua, Nicaragua, area since late October 1983. These measures include the preparation of trench networks to improve the defenses of the more accessible approaches to the city, preparation of field-artillery sites, the construction of at least six vehicle dispersal/storage areas, and the improvement of air defenses in and around the capital (Figure 1). (S/WN/NOFORN)

2. Extensive trench networks have been constructed throughout the Managua area. The newly constructed trenches are used to defend most of the major, open approaches to the city from the lowland areas to the east, southeast, and west. These trenches merge with the natural barrier formed by the Sierra de Managua Mountains to the south, effectively providing a defensive encirclement of Managua. The largest trench network is on the east side of the city and extends from near the shoreline of Lake Managua to the village of San Jeronimo (12-03-25N 086-12-45W), west of the Inter-American Highway. Another large trench network is in an area west of the city, approximately 2 nautical miles (nm) southwest of La Quebradita Military Barracks Area [redacted] Smaller, local trenches have been identified throughout the residential and commercial areas of Managua. (S/WN/NOFORN) 25X1

3. The sawtooth-shaped trench network is the most prevalent type; it is often several hundred meters long with a probable weapons-firing position at the apex of each angle of the trench (Figure 2). This type of network has been observed primarily in large open areas, along roads and streams, and surrounding major military installations. Less complex, linear trench networks complement the sawtooth-shaped systems (Figure 3). Much smaller, local, usually L- or short sawtooth-shaped trenches have been identified throughout populated areas of the city (Figure 4). These shorter trenches are used to guard the accesses to government facilities and have also been observed in small vacant lots throughout urban areas. (S/WN/NOFORN)

4. At least five field-artillery sites, with three or four firing positions each, have been prepared southeast of Managua. None of these sites has been observed occupied. These sites are generally oriented towards the southeast; all are within 1 nm of 12-05-30N 086-12-30W, and all were newly identified on imagery of [redacted] (S/WN/NOFORN) 25X1

5. Six vehicle dispersal/storage areas have been identified near Managua. These areas are in wooded and/or hilly terrain and contain from 11 to 55 single-vehicle, road-connected revetments. At least three of these areas were partially occupied by vehicles on [redacted] (Figure 5). These dispersal/ 25X1
storage areas may provide protection for vehicles from the local military garrisons. As of [redacted] 25X1
vehicle dispersal/storage areas had been identified in the vicinity of:

- 12-05-25N 086-22-50W—24 revetments, some occupied (not shown on Figure 1);
- 12-05-08N 086-17-24W—15 revetments, some occupied;
- 12-05-15N 086-16-17W—30 revetments, some occupied;
- 12-05-45N 086-14-15W—11 revetments, unoccupied;
- 12-07-10N 086-06-35W—55 revetments, unoccupied (not shown on Figure 1); and
- 12-07-10N 086-16-55W—13 revetments, unoccupied. (S/WN/NOFORN)

6. An improvement of the air defenses around Managua has been observed in recent months. Six-gun batteries of 37mm (M-1939) antiaircraft (AA) guns (Figure 6) have been deployed at six sites in the central and northwestern areas of the city. One of the 37mm AA sites is approximately 1,000 meters west of the US Embassy compound. (The 37mm AA guns were first confirmed in Nicaragua on [redacted] 25X1
[redacted] (S/WN/NOFORN) 25X1

7. Three ZPU-4 14.5mm six-gun antiaircraft heavy machine gun (AAHMG) batteries defend Sandino Airfield [redacted] on the eastern outskirts of Managua. ZPU-4 AAHMG batteries have occupied various sites at this airfield, both before and after the recent upgrading of defenses. In addition to these light AA defenses, six SA-7 firing positions have been identified in the Managua area. These positions were constructed prior to October; no new SA-7 positions have been identified since the recent improvements of the Managua defenses began. (S/WN/NOFORN) 25X1

8. As of [redacted] occupied AA sites in the Managua area (Figure 1) were located at: 25X1

37mm (M-1939) six-gun AA batteries

12-09-50N 086-18-40W
12-09-50N 086-16-50W
12-07-48N 086-15-36W
12-08-25N 086-18-55W
12-09-45N 086-20-00W
12-07-25N 086-17-10W. (S/WN/NOFORN)

ZPU-4 14.5mm six-gun AAHMG batteries

12-08-35N 086-10-50W
12-08-30N 086-10-40W
12-08-25N 086-10-10W

9. Similar, although less extensive, defensive activity has also occurred in the vicinity of the town of Puerto Cabezas, 200 nm northeast of Managua on the northeastern coast of Nicaragua. (S/WN/NOFORN)

[redacted] 25X1

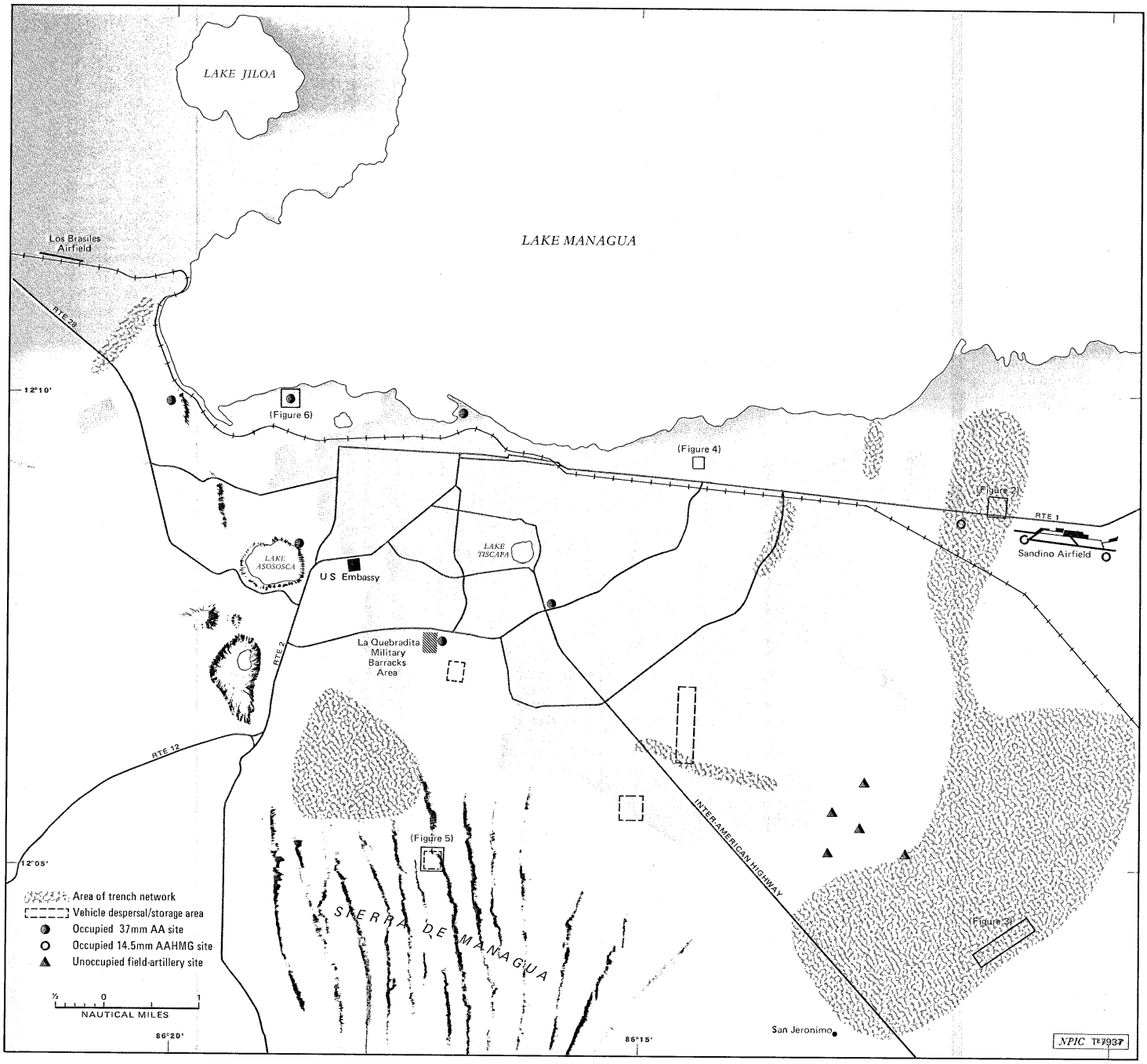
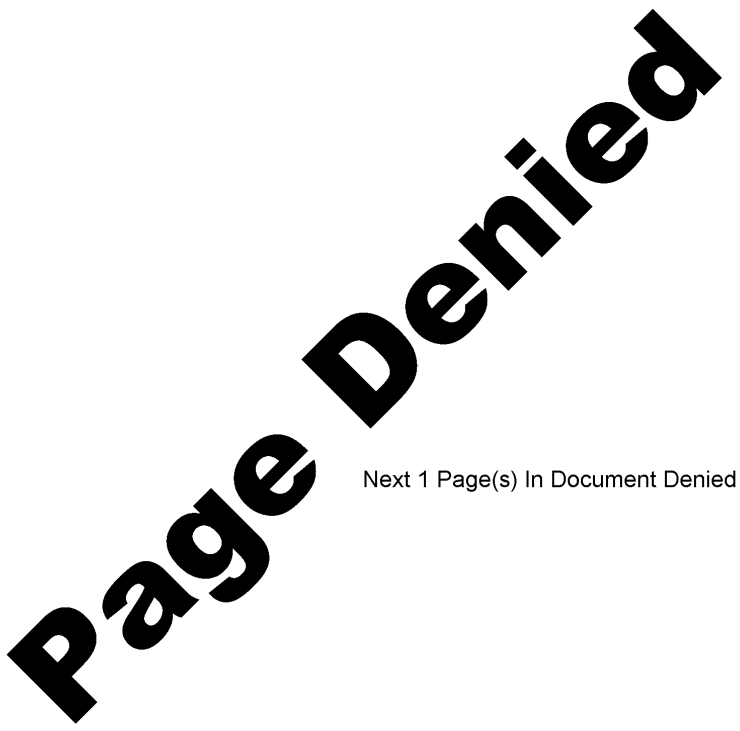


FIGURE 1. DEFENSES IN THE MANAGUA, NICARAGUA, AREA



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REFERENCES

IMAGERY

All available satellite and aircraft imagery acquired from [redacted] was used in the preparation of this report. (S/WN/NOFORN) 25X1

Comments and queries regarding this report are welcome. They may be directed to [redacted] USA, Third World Forces Division, Imagery Exploitation Group, NPIC, [redacted] 25X1 25X1